MAINTENANCE **ODUCTION**

MSGT WORKMAN

PRODUCTION / PEB / SUPPLY SUPPORT

OVERVIEW

• The purpose of this period of instruction is to provide you with the knowledge and skills necessary to effectively supervise a maintenance shop, the basic knowledge of the Marine Corps Financial Management System and unit budget procedures as they relate to maintenance.

PRODUCTION / PEB / SUPPLY SUPPORT

TERMINAL LEARNING OBJECTIVES

ENABLING LEARNING OBJECTIVES

MAINTENANCE PRODUCTION / PEB / SUPPLY SUPPORT

EVALUATION

There will be a written examination at the time indicated on your training schedule

PRODUCTION?

- Is maintenance which involves physical performance of various maintenance functions.
 - ✓ PM, CM, MODS., CAL., CONVERSION, MODERIZATION, OVERHAUL, AND REBUILD
 - **✓** MCO P4790.2_, Chapter 3, pg 3-3

PRODUCTION

1. ACCEPTANCE PHASE.

- a. ACCEPTANCE INSPECTION.
- **b.** ACCEPTANCE SCHEDULING.
- c. SHOP ASSIGNMENT.
- 2. EQUIPMENT INDUCTION PHASE.
- 3. ACTIVE MAINTENANCE PHASE.
- 4. MAINTENANCE CLOSEOUT PHASE.

ACCEPTANCE PHASE

- 1. It's the initial step of the maintenance process. It consists of:
 - **✓** Acceptance Inspections.
 - **✓** Acceptance Scheduling.
 - **✓** Shop Assignments.

CONT.

>ACCEPTANCE INSPECTION. PURPOSE.

- ✓ Is to ensure that the equipment is complete and prepared for the required maintenance service.
- ✓ Conducted on equipment upon initial receipt by the maintenance activity.

HOUCE HIGH

Procedures

ACCEPATANCE INSPECTION PROCESS.

- First. Determine that the equipment:
 - ✓ Is complete.
 - ✓ Appropriate operator maintenance, including cleaning, has been completed.
 - ✓ Remove and store collateral equipment, and note the ERO. (unless required during maintenance)
 - * Equipment that is incomplete, or not properly prepared should be reported to the owning unit's commander.

- Second. Verify that the ERO has been properly prepared IAW TM 4700-15/1.
 - **✓**Ensure the serial number matches the equipment's data plate.
- **Third.** Once ERO is verified correct:
 - ✓ Acceptance of the equipment for the required services is accomplished by <u>signing</u> the ERO.

Fourth.

- **✓** Assign a production priority for use within the maintenance activity.
- ✓ Priority will be based on the ERO priority and other criteria per the Maintenance Officer or Chief.

>ACCEPTANCE SCHEDULING PURPOSE.

- ✓ To have the equipment arrive at the maintenance facility at or after the time that the required maintenance resources are available.
- * This allows the equip. owner maximum operational use and avoiding large quantities of equipment awaiting maintenance.

- Normally applicable for all:
 - ✓PM's
 - **✓** Modifications
 - **✓** Routine repairs
- Requires close coordination between the owner and maintenance to be effective.

- Scheduling Procedures.
 - ✓ 1st. Preparation of a deferred or unit recall ERO by the owning unit.
 - ✓ 2nd. Acceptance of an ERO by the maintenance activity which includes establishment, when appropriate, of the date of delivery.
 - **✓ 3rd.** Scheduling to a specific shop within the maintenance activity.
 - ✓ 4th. Initiate an EROSL to ensure the availability of parts at the time of the service.

>SHOP ASSIGNMENT PURPOSE.

- ✓ Equipment is assigned to a specific maintenance shop within the maintenance activity upon completion of the acceptance inspection and scheduling.
- * Shops that have only one maintenance shop, assignments occur during the acceptance inspection.

- Procedures for shop assignments.
 - **✓** 1st. Identify the type of shop to perform the required service. Example: Mod for MCT
 - **✓ 2nd.** Review workloads and available resources of the individual shops.
 - ✓3rd. Assign the ERO to a specific shop. Consider the priority of the ERO so not to impair supporting units.
 - ✓ 4th. Assign the PEB parts required to ensure availability at the time of induction.

PHASE

- Is the physical commitment of an ERO and associated equipment requiring service.
 - ✓Induction of equipment into a specified shop should be IAW with priority established in the equipment acceptance phase.
 - ✓ Equipment should be called for by the maintenance shop when necessary resources are available.

ACTIVE MAINTENANCE PHASE

- Production actions performed following induction of the ERO and equipment.
 - ✓ Performed in a sequence of logical steps which are designed to ensure that required services are conducted in an efficient, effective manner.
 - **✓**Continual emphasis is placed on Quality Control for all tasks.

conduct are described in the following:

- > Step One. Inspection of the equipment.
 - ✓ A detailed inspection of the equipment serves as a basis for the performance of the maintenance and includes:
 - *Locating, Identifying, and Inventorying equipment and components.
 - Verifying all, pub, paperwork. (ID / Serial # on paperwork matches actual tractor)

- ► Step Two. Preparation for the performance of maintenance actions include assembly of:
 - **✓**Technical Manuals.
 - **✓** Technical Data.
 - **✓** Support and Test Equipment.
- * Adequate preparation:
 - Reduces actual time required to perform maintenance.
 - Ensures tasks are not initiated for which the required resources are not available.

- **► <u>Step Three</u>**. Performance of Maintenance Actions. (PM, CM, Mod, Cal)
 - **✓** Always IAW the appropriate Technical Manuals.
 - ✓MCO P4790.2_, Appendix F contains the maintenance process and relationship of maintenance production to information flow.
 - ✓ 12 Steps process on 2 or higher EOM, CM, Mod, Cal, Cat Code Assignment.

PMCS.

- **✓** Obtain required materials.
- ✓ Unit not authorized PEB, ensure the required materials are ordered in sufficient time for the required scheduled PMCS.
- **✓** Performed IAW procedures in the applicable TM.
- ✓ Ensure all records and forms are updated IAW TM 4700-15/1_.

Corrective Maintenance.

- ✓ Isolate the cause of equipment malfunction.
- **✓**Obtain required repair parts/SecReps.
 - Order materials when requirement becomes known. ASAP!
- **✓** Correct the equipment fault.
 - Fault correction is the goal of all CM actions.
 - Ensure proper maintenance techniques are used to install repair parts. Use TM!!!

Modification control.

- **✓** Obtain required materials IAW MI.
- ✓ Application of the MI will be applied IAW instructions set forth in the publication (MI).
- ✓ Upon completion, update ERO and all appropriate equipment records.

Calibration.

- ✓ Calibration procedures will be conducted IAW MCO 4733.1_.
- **✓** Conducted only at approved Cal Labs
- **✓** Once completed, update all equipment records are updated.

- **Step Four.** Checking of completed maintenance actions on an ERO.
 - ✓ Personnel will check completed work and perform final adjustments.
 - **✓** Bringing equipment within tolerances specified in the Technical Pubs.
 - *Positive indicator that action has been successfully completed.
 - ✓ Adjustments shall be performed by or under supervision of qualified personnel.

<u>Active Maint. Phase steps and conduct.</u>

- > Step Five. Quality Control.
 - ✓ Requires complete equipment checkout to include all records and forms.
 - ✓ Qualified personnel under actual or simulated operating conditions.
 - ✓ Equipment not able to perform will be rejected and recommendations made for further maintenance actions.
 - ✓ Acceptable performance results in the completion of the Active Maintenance Phase. Moved to the Close-Out Phase.

conduct cont.

- > Step Six. Cleanup.
 - ✓ Time and resources must be allocated for cleanup.
 - ✓ The following must be cleaned and inventoried for future use:
 - Support and Test Equipment
 - *****Tools
 - *Maintenance areas
 - ***TM's returned to the library**
 - ✓ Defective parts and other residue must be removed using proper disposal procedures.

MAINTENANCE CLOSE-OUT PHASE

- Commences when:
 - ✓ Equip. has been repaired & returned to the owner

<u>OR</u>

- ✓ A decision has been made to evacuate or dispose of the equipment.
- * Maintenance supervisors will ensure that the close-out process is accurate, complete, and coordinated.

MAINTENANCE CLOSE-OUT PHASE CONT.

- Requires close coordination with the owning unit to ensure they are notified so the equipment can be picked up.
- Special packaging, preservation, transportation & shipping requirements are taken care of.
- Owning unit should pick up promptly.
- Maint supervisory personnel must ensure equipment records have been properly completed IAW TM 4700-15/1_.

QUESTIONS TO YOU!!!

- What are the four maintenance phases?
- A.Acceptance, Induction, Active, and Close-Out Phase.

BREAK!!!

MAINTENANCE FUNCTIONS

- **PMCS**. Checking & servicing performed by personnel for maintaining equipment in a satisfactory operating condition.
- ► PMCS is accomplished by Systematic inspection, Detection, and Correction of incipient failures.
 - ✓ Either before they occur, or before they develop into major defects

PMCS

- Systematic PMCS program consist of:
 - **✓** Inspecting
 - Cleaning
 - ✓ Servicing
 - **✓** Lubricating
 - **✓** Adjusting
- * The key to equipment readiness.

PMCS

- When administered properly it will help prevent:
 - **✓** Early breakdown.
 - **✓** Failure of equipment.
 - **✓** Costly, complex and time consuming repairs

AND WILL ALLOW

✓ Optimum use of maintenance resources.

PMCS PROGRAM

- Owning or using unit is responsible for establishing and performing PMCS on equipment in a appropriate and timely manner.
- ► Will be scheduled IAW TM-4700-15/1_, Ch. 3.
- > When due conducted per the applicable TM.
- ► This also applies to units temp. loaning equipment.

PMCS CONT.

- >Generally cyclic in nature.
 - ✓ One cycle being completed each year of the equipment's life.
 - ✓ Referred to as scheduled maintenance and include PMCS performed by:

PMCS CONT.

- **✓**Operator/user:
 - *Before, during, and after operation.
- **✓**Operator/crew:
 - Hourly, daily, monthly or special occurrence basis
- ✓ Organizational maintenance personnel, assisted by the operator:
 - *calendar, mileage, or hours of operation.

PMCS CONT.

- Operator/Crew will perform scheduled PMCS only within their authorized EOM.
 - ✓ If evacuation is necessary operator/crew will accompany the equipment, if feasible, <u>and</u> <u>assist</u>.
- Equipment with a manufacturer's warranty will have PMCS's scheduled and performed per the applicable TM, until such warranty expires.
 - **✓** Be sure to research the equipment's applicable material fielding plan (FP).

DEFEKKED PMCS

- Equipment PMCS may be deferred or intervals extended for the following reasons:
 - **✓** Administrative Storage.
 - **✓** Administrative Deadline.
- Criteria for these programs are as follows:

ADMINISTRATIVE STORAGE

- >MSC Commanders may authorize.
- > When authorized, the equipment must:
 - ✓ Not be stored < 12 months or > 30 months.
 - **✓** Be in Condition Code "A".
 - **✓** Be visually inspected quarterly.
 - **✓** Exercised every 6 months.

ADMINISTRATIVE STORAGE CONT.

- **✓** Have a semi-annual PMCS before induction.
- **✓** Have any due PMCS conducted & a new PMCS scheduled upon removal.
- ✓Be in a level "B" (intermediate protection) preservation.
 - * This provides protection under anticipated favorable conditions of worldwide shipment, handling, and storage.

ADMINISTRATIVE DEADLINE

- Commanding Officers may authorize.
- When this program is authorized, the equipment may have batteries and pilferage items removed and stored and must:
 - ✓ Not be stored < 6 months or > 12 months.
 - **✓** Be in a mission capable status.
 - **✓** Be visually inspected monthly.

ADMINISTRATIVE DEADLINE CONT.

- ✓ Have a daily or equivalent PMCS performed in conjunction w/the quarterly exercise.
- ✓ Have a Semi-Annual or Annual PMCS performed within 30 days before induction.
- ✓ Have any due PMCS conducted and a new PMCS scheduled upon removal.

SPECIAL PMCS'S

- FMF or MC Reserve units alerted for combat or training operations will perform an LTI of all equipment prior to deployment.
 - ✓ Performed by the unit maintenance personnel to ensure equipment is:
 - Complete
 - Safe to operate
 - Capable of performing its designated combat function.

CONT.

- All equipment, upon receipt, will receive an appropriate acceptance LTI and such services required by the equipment's TM.
 - ✓ Will include correction of defects and determination of application of required modifications.
 - **✓** Upon completion of the LTI and PMCS, records <u>WILL</u> be updated.

SPECIAL PMCS'S CONT.

- If equipment has been exposed to salt or fresh water or has been operated in loose sand or mud, service IAW applicable TM to include:
 - **√** Wash with fresh water
 - **✓** Perform appropriate servicing
 - **✓** Check for contamination, ASAP.

RELATIONSHIP OF PMCS TO CM

- The objective of PMCS is to reduce CM. This is evident in the following areas:
- ✓ Common facilities utilized for both CM and PM.
 - * Scheduling is important so that PM services can be performed, while not impeding the timely completion of CM.

RELATIONSHIP OF PMCS TO CM CONT.

- **✓** Common servicing.
 - Scheduled PMCS is required during CM. (i.e. Engine repair requiring oil & filter change.)
 - Decision must be made, perform the full PMCS or modify the PMCS.
 - Case-by-case decision made dependant on:
 - Extent of tasks common to PM & CM requirements:
 - When next PMCS is scheduled.
 - * Update records and forms!

RELATIONSHIP OF PMCS TO CM CONT.

- **✓** Defects discovered during PMCS.
 - PMCS detect broken or worn parts before major damage occurs.
 - Make a decision whether to perform necessary CM independently or in conjunction W/ PMCS.
 - 2nd EOM or higher PMCS, complete as far as practical, PMCS ERO will be closed.
 - Remaining CM, accomplish on separate CM ERO.

RELATIONSHIP OF PMCS TO CM CONT.

- **✓ EVAC HECH for CM.**
 - All PMCS due will be performed before evac.
 - * Exception would be when a PMCS would have to be repeated during CM. (Not changing oil when engine is to be replaced)
 - Waiting or undergoing CM must still receive its scheduled PMCS.
 - Equipment undergoing CM at the IMA, PMCS's must be coordinated with the IMA.

MAINTENANCE FUNCTION

CORRECTIVE MAINTENANCE. Consists of all maintenance actions performed, as a result of failure, to restore equipment to a specific condition.

CORRECTIVE MAINTENANCE

Owning unit is responsible for performance of all CM within its authorized EOM.

If EOM exceeds what is authorized, the designated support maintenance activity is now responsible.

CORRECTIVE MAINTENANCE CONT.

- > Use of Established CM procedures.
 - **✓** Will be performed IAW TM.
 - ✓ Deviation of procedures should be minimized and consistent with the effective performance of the specific maintenance tasks.

MAINTENANCE PRODUCTION PROCESS

- ►MCO P4790.2_, Appendix "F" contains a series of steps depicting the maintenance process.
 - ✓ These 12 steps are presented as guidance and are intended to show a logical sequence necessary to complete the various maintenance functions.

QUESTIONS?

QUESTIONS TO YOU!!!

- What are the four maintenance phases?
- A.Acceptance, Induction, Active, and Close-Out Phase.

- What is corrective maintenance?
- A. Consist of all maintenance actions performed, as a result of failure, to restore equipment to a specific condition.

BREAK!!!

MAINTENANCE CYCLE TIME

DEFINITION:

The period of time equipment is inoperative and requires repairs

MAXIMUM MAINTENANCE CYCLE TIME

- Relates to the intermediate maintenance. (IMA).
- Time commences on the DRIS when item is received into the IMA.
 - * Items evacuated for lack of supply support (NMCS) the IMA will use the 2nd echelon DRIS.
- Following times are for equipment inducted into the IMA:

- **✓**End Items.
 - 180 days for West-/Mid-Pac units.
 - 120 days for CONUS units.

- **Secondary Reparable** (CAT Codes O,F,H,D)
 - 90 days West-/Pac
 - 60 days CONUS

- Max. effort is required to repair equipment prior to it reaching the max. maintenance cycle time.
- Actions the IMA must take to complete the repairs before exceeding the MMCT are as follows:

- ><u>1</u>st
 - **✓** Do a detailed inspection.
 - ✓ Requisition of faulty components (SecReps/piece parts).
 - * Accomplished within 5 working days of DRIS.



- ✓ Use all supply sources available IAW UM 4400-15 or UM 4400-124.
- **✓** Requisition parts from all sources, such as:
 - Commercial
 - Fabrication
 - Salvage
 - Contract maint.



Repeated supply follow-ups is a must as outlined in UM 4400-15 and UM 4400-124.

- ➤ Max. Maintenance Cycle Time expires or documentation shows that repairs cannot be completed, the following action will be followed:
 - ✓ 3rd echelon will report the item to the supporting 4th echelon for disposition instructions or action include all documentation of steps taken.

- **✓** The 4th EOM shops will:
 - Submit Recoverable Items Report (WIR) on controlled items IAW MCO P4400.82_.
 - * Include all actions taken and follow-up message traffic to MCLB Albany.
 - Dispose of all Non-controlled items IAW UM 4400-15 or UM 4400-124.

- **Exceptions**.
 - ✓ Maintenance Officer of the IMA can extend the Max. Maintenance Cycle Time when economically justified and advantageous to mission accomplishment.
 - Subject to approval by the unit commander.
 - * Documentation for repairs must support the decision.

CANNIBALIZATION AND SELECTIVE INTERCHANGE

Guidance and clarification can be found in MCO P4790.2_, pg 1-12.

CANNIBALIZATION AND SELECTIVE INTERCHANGE CONT.

CANNIBALIZATION.

Removal of serviceable parts from one item of equipment to install them on another item of equipment.

CANNIBALIZATION AND SELECTIVE INTERCHANGE CONT.

SELECTIVE INTERCHANGE.

Exchange of selected serviceable parts from deadlined equipment for unserviceable parts from a like piece of equipment.

- * Exchange must be complete to qualify
- * May take the form of a requisition in lieu of actual unserviceable part(s).

DIFFERENCE

> Selective interchange addresses replacement of serviceable parts.

Cannibalization is when you <u>do not</u> replace those parts that you remove.

DIFFERENCE CONT.

- Has led maintenance personnel to believe that selective interchange is not cannibalization.
 - ✓ It is a lesser degree of cannibalization.
 - ✓ Selective interchange will require the same authorization as cannibalization.

CANNIBALIZATION AND SELECTIVE INTERCHANGE CONT.

- Not employed except for the following:
 - ✓ Ensure minimum number of equipment is deadlined at any one time.
 - ✓ Exceptional procedure and is only for when:
 - An operational commitment is imminent.... <u>AND</u>....
 - It appears the required part cannot be obtained on a timely basis.

CANNIBALIZATION AND SELECTIVE INTERCHANGE CONT.

- Strict managerial control must be implemented at the command and maintenance facility.
 - ✓ This ensures the commander concurs with the interchange.
- General rule is that it is completed at the lowest EOM having the capability to execute the procedure.

CANNIBALIZATION AND SELECTIVE INTERCHANGE CONT.

- Parts removed will not place the equipment in a WIR status.
 - ✓ Meaning not to exceed its one-time repair cost, or Maximum Maintenance Cycle Time.
- Secondary reparables must be in the best interest of the Marine Corps.
 - **✓** Must be cost-effective
 - ✓ Remove equipment from deadlined without degrading another beyond economical repair.

CANNIBALIZATION AND SELECTIVE INTERCHANGE CONT.

- Parts and supply requisitions are ordered on the item of equipment from which they were removed.
- Unserviceable parts that are not reparable will be disposed of and placed on order.

CANNIBALIZATION AND SELECTIVE INTERCHANGE CONT.

- Secondary reparable interchange:
 - ✓ Enough time must remain for supply to take action.
 - ✓ Commanders must ensure that this does not create a permanent deadlined item of equipment.

CANNIBALIZATION AND SELECTIVE INTERCHANGE CONT.

- Must be determined on a case-by-case basis and authorized by:
 - ✓CMC (LP)
 - **✓**MSC Commander
 - ✓ CO of any unit authorized by T/O cover page to perform IMA and/or authorized float holder.

CANNIBALIZATION AND SELECTIVE INTERCHANGE CONT.

- Commanders must ensure that:
 - ✓ Equipment/SEC-REP is in a IMA category of the maintenance phase.
 - ✓ Owning unit commander has approved of the Part/SEC-REP to be removed.

OVERFLOW MAINTENANCE

DEFINITION: Maintenance within the units authorized EOM but beyond its capability because of restrictive or unusual circumstances and is consequently performed by another unit, usually a supporting activity.

The following conditions may cause this:

CONT.

- ✓ Insufficient maintenance resources, such as:
 - Shortage of mechanics or technicians.
 - Shop space or facilities/maintenance equipment.
 - Lack of supply support. Only when:
 - Proper reconciliation is followed.
 - Follow-ups are documented.
 - Requisition of not in stock parts from other sources will not provide relief in maximum maintenance time.

OVERFLOW MAINTENANCE CONT.

- ✓ Unit has surge in workload, such as:
 - Pre-deployment schedule.
 - Post-deployment requirements.
 - Urgent modifications required on high density equipment.

OVERFLOW MAINTENANCE CONT.

✓ Cost effectiveness:

- The support maintenance activity performs the organizational maintenance in conjunction or independent of the IMA. This is contingent on:
 - Availability of maint resources at the supporting activity
 - Agreement between support activity and supported unit

QUESTIONS?

QUIZ "A"

• How many days does the IMA have to repair an item of equipment in CONUS?

A.120 days

• What is the definition of overflow maintenance?

A .Is that maintenance within the unit's authorized EOM but beyond its capability because of restrictive and/or unusual circumstance and is consequently performed by another unit.

Q. <u>True or False</u>? Cannibalization is the removal of serviceable parts from one item of equipment to install them on another item of equipment without placing those parts on order.

A. TRUE!

Q. <u>True or False</u>? Selective Interchange is the exchange of selected serviceable repair parts or components from a deadlined item of equipment for unserviceable repair parts or components from a like item.

A. TRUE!

BREAK!!!

REPAIR PARTS MANAGEMENT

PRE-EXPENDED BIN

- PURPOSE. Provide continuous availability of high usage, fast moving items.
 - **✓** Common hardware items.
 - **✓** Scheduled PMCS items.
 - ✓ Items that effect readiness of a unit.

- PRIMARY REASON. Is to enhance:
 - **✓** Readiness.
 - **✓** Maintenance operations.
 - Economical management of low-cost, fast moving expendable items.

LITIMATE GOAL. Place fast moving, critical repair parts at the same location of the mechanics.

- Stocking of these PEB items at the commodity enables units to return critical assets to an operational status sooner.
- Commands must monitor PEB usage so that only required items are stocked.
- PEB stockage should be minimal.

CONT.

- Items authorized in PEB ensure availability of those fast moving parts, and require planning and coordination among:
 - **✓**MMO
 - **✓** Maintenance section
 - **✓** Supply officer
- Planning & coordination results in items being available for across the counter issue, rather than being in back-order status.

- The CO's decision to authorize a PEB is made with consideration to:
 - **✓**Time & effort of personnel to:
 - Store
 - Stock
 - Account for the items
 - ✓ Unit's funds will be expended prior to usage.

CONT.

- When a PEB is determined to enhance the maintenance effort the unit commander will publish a letter authorizing specific items. It will contain, at a minimum:
 - Nomen
 - NSN/Part #
 - Max Qty authorized.
 - U/I
 - **U/P**
 - Extended price.
 - Reorder point

- Items procured and issued to the PEB require no further accounting.

 HOWEVER
- ► Prudent management dictates that simple procedures are required for:
 - **✓** Locating/Identifying.
 - **✓** Establishing a time when to replenish.

- Examples of these procedures are as follows:
 - ✓ Need to segregate the NSN's.
 - Establish a ROP in the authorization letter.
 - Requires periodic review.
 - **✓** Place the ROP in a bag.

- PEB procedures should ensure replenishment within limits of necessary control and accountability.
- Should not be a substitute for normal supply procedures from other sources of supply.

CONT.

- > PEB shall be reviewed and approved annually.
 - * Changes can also be approved periodically.
- If the authorization letter has enclosures listing PEB items, the CO must initial each page.
- Personnel will review and assist CO's, as required, with establishing and maintaining PEB's:
 - **✓** Range
 - **✓** Depth

- MMSOP must include procedures for:
 - **✓** Identifying.
 - **✓** Locating.
 - **✓** Reordering PEB items.



CRITERIA

- Is based on the U/P and item usage.
- **►<u>U/P criteria.</u>**
 - ✓ Shall be < or = to \$500.00 per U/I.
- **►**<u>Usage criteria</u>.
 - ✓ Items applied or consumed as a Full U/I (EA, PR) it must have 6 hits in 12 months.
 - ✓ Items applied or consumed less than full U/I (RL, HD) it must have 1 hit 12 months.

CONT.

- Total dollar value of a PEB item that is applied is less than or equal to \$50.00, its not mandatory to show usage via a class I system using MIMMS.
- Usage must be compiled using the most logical method deemed appropriate by the CO.

STOCKAGE CRITERIA:

- Consumables applied as a full U/I will not exceed 30 days of supply based on the previous 12 months.
 - * Items having an average Qty. of more than one-half over the previous 12 months are authorized a Qty. of one.

PRE-EXPENDED BIN CONT.

STOCKAGE (Cont'd.):

Items applied in qty's of less than a full U/I may stock no more than 2 full U/I or 30 days of supply or whichever is greater.

BROKEN U/I'S

- ► Broken U/I's of common hardware costing less than or equal to \$5.00 per U/I that is ordered against a CM ERO that do not meet PEB criteria do not require further control or accounting once applied.
 - ✓ Leftover portion will be displayed in plain view of all personnel, and used until exhausted.
 - ✓ Ensure all items are used prior to reordering.

BROKEN U/I'S CONT.

- ► Broken U/I's not considered common hardware or costing more than \$5.00 per U/I will be added to the PEB list. List must identify:
 - ✓ It is a Broken Unit of Issue.
 - **✓** Date when it was added to the list.
 - **✓** Retain until exhausted. Do not re-order.
 - * If no PEB is authorized, add items to Broken U/I's list.

PEB WAIVER

- **▶OIC, FSMAO-1 ltr 4400/U87 of 15 APR 05.**
 - **✓** Waiver of PEB procedures and requirements.
 - **✓** Has been approved and will incorporated into the next revision or change to the MCO P4400.150_.

- > Usage criteria is to restrictive.
- Does not allow the flexibility to stock PEB based on additional criteria such as:
 - **✓**Fluctuating usage
 - **✓** Excessive lead-time associated to ordering slow-moving items or high impact items.

- Difficulties in capturing usage data via MIMMS-AIS has prevented units from accurately stocking PEB.
- The new usage criteria is as follows:

- ✓ Only items for which there is a known or anticipated requirement will be stocked.
- ✓ Historical usage data from:
 - MIMMS-AIS
 - Manual tracking records should be used to facilitate sound stocking decisions.

- Advice code "PB" must be used accurately when an item is pulled from the PEB.
 - * MIMMS-AIS does not capture data unless this is done.
- Candidate for PEB's should be continuous process at the unit level using the most logical method. (Local databases & manual records)
- Key stockage decisions should include consideration of lead time and readiness impact.

- ► Broken U/I's of common hardware that do not meet PEB criteria will be placed in plain view of maintenance personnel and used until exhausted.
 - ✓ Control & accountability not required
 - ✓ Must use on-hand prior to reordering
- ► Broken U/I's will not be added to authorized PEB list, but will be placed on BUI list so they can be identified and retained/used until exhausted.

PEB CONT.

- CO's will review no less than annually and document their approved items and associated quantities via official correspondence.
- ► MMO & SupO will review after the initial 6 months, and annually thereafter by the CO.
 - ✓ Ensures proper risk management and expenditures of funds are consistent with needs of the unit.
 - ✓ Periodic reviews throughout the year will ensure a PEB's appropriate range and depth.

QUESTIONS?

QUESTIONS TO YOU!

- Q. What is the primary reason for maintaining a PEB?
- A. <u>Is to enhance readiness, maintenance</u> <u>operations, and economical management</u> <u>of low-cost, fast moving expendable</u> items.

QUESTIONS TO YOU!

- The unit commander will publish a letter authorizing specific items to be included in the PEB. The letter must contain a minimum of seven items, what are they?
- A. Nomen., NSN, Max. Qty. Authorized, U/I, U/P, Extended Price, and ROP.

QUESTIONS TO YOU!

Q. What is the Unit Price criteria for PEB stockage per Unit of Issue?

A. \$500.00

BREAK!!!

ERO PARTS BIN

PURPOSE: ERO Parts Bin (Layettes) is a means of controlling and/or accounting for repair parts.

DEFINITION: A place where parts that were ordered on a EROSL are stored, such as a shelf, box, or something similar.

- All parts for the same ERO Number will be stored together.
 - **✓**ERO# normally indicates the location.
 - ✓ Large items that will not fit in their bin may be kept separately, but must be marked with its ERO#.

- Parts can be traced from requisition to receipt by the supply section through SASSY and MIMMS AIS.
 - **✓**Once RCVD automated accounting stops.
 - ✓ Shops will annotate the EROSL when received and issued with the date and quantity.

- **ERO Parts Bins must be validated:**
 - **✓** Daily
 - **✓**Bi-Weekly
- ➤ Validation is the process used to confirm repair part requirements, it involves confirmation of:
 - **✓**Items that are still needed.
 - **✓** Cancellations.
 - **✓** Receipts.
 - **✓**Scrounges.
 - **✓** Current supply status

- When confirming needed items, you must ensure:
 - ✓ Items have been made known.
 - ✓ Still exist.
 - **✓** Are resident in the supply system.

VALIDATION PROCEDURES

- Each day the MIMMS/Layettes Clerk will:
 - **✓** Verify the DTL.
 - ✓ Ensure ERO's on the DPR reflect the correct Job Status.
 - ✓ Ensure EROSL's have been prepared and submitted for ERO's in SHT PART status w/ nothing on order.
 - * Not submitted, submit ASAP.

VALIDATION PROCEDURES CONT.

- ✓ Check off parts on EROSL that have been submitted and appear on DPR.
 - When all parts appear on DPR, file in Layette Bin.
 - If any parts transactions on the EROSL, do not appear on DPR, check off those that do appear and file in a pending file.
 - * Always verify data for accuracy.

VALIDATION PROCEDURES CONT.

- An EROSL will have the following annotations: (Annotation procedures will be established in the MSCMMSOP)
 - Qty. RCVD and date.
 - ERO Bin location. If ERO# is used as location annotation is not required.
 - Parts issued for installation.

CONT.

- Each day the shop/maintenance officer/chief will ensure:
- ✓ All Cat. Code "M" EROs with all critical parts received, but non-critical parts still outstanding:
 - Critical parts are installed as well as noncritical parts that practical to install.
 - Either downgrade or a new ERO will be opened.
- * If new ERO is opened ensure the following actions have been accomplished:

VALIDATION PROCEDURES CONT.

- 1. Ensure new ERO is opened.
- 2. Pending parts have been transferred via an "8" transaction w/authority code "9".
- 3. Any parts which have been received & could not be installed, place in new ERO bin.
- 4. Ensure the old ERO is closed.

BI-WEEKLY VALIDATION

- Bi-weekly, after completing the daily validation, the <u>shop/maintenance officer</u> <u>or chief</u> will:
 - **▼**Review the daily validation procedures *IAW MCO P4790.2_, pg. C-3 and MMSOP.
 - ✓ Ensure that all ERO's cite the correct category codes the accurately reflect the actual condition and status of the equipment.

BI-WEEKLY VALIDATION CONT.

- ✓ Compare all ERO's on the DPR in SHT PART status with the ERO and EROSL to ensure:
 - Job status is correct.
 - Cat. Codes & Priority are valid, and consistent.
 - EROSL has been prepared, Document numbers assigned and processed.
 - Priorities assigned to the document, logically follow the Priority & Cat. Code.
 - Priorities meet criteria contained in MCO 4400.16_.

CONT.

- ✓ Inventory bins by comparing the EROSL to the parts in the bin.
 - Annotate the EROSL with changes as required.
 - Ensure any changes are entered into MIMMS-AIS.
 - * Parts received should reflect a received date on the DPR.
- ✓ Ensure all ERO's have been properly prepared.

RECONCILIATION PROCEDURES

DEFINITION: The process used to ensure that validation requirements are properly logged within the MIMMS/SASSY (AIS) output reports.

Every 2 weeks, after completing validation, the shop/maintenance officer or chief will accomplish the following:

RECONCILIATION PROCEDURES CONT.

- ✓ EROSL is annotated with all receipts, CANC's and scrounges, and have been submitted & processed.
- **✓** Supply status provided is:
 - Current.
 - Acceptable.
 - Understood.
 - * Supply section should clarify any status not understood, or does not respond according to the priority.

RECONCILIATION PROCEDURES CONT.

- ✓ Ensure DPR is annotated with current and correct data and reconciled with supply .
 - Prepare and submit, required transactions to correct invalid data reflected on the DPR.

ERO PARTS BIN

- EROSL will be annotated to indicate all parts received by the maintenance section from the supply section.
 - ✓ Exception to the rule is stated in paragraph "k".
- Annotate the EROSL when parts are removed from the layettes.
 - ✓ If part is not applied, part should be returned to the layettes.

- Annotate EROSL when received parts have been transferred from one ERO to another.
 - ✓ Before receipt by supply, parts may be transferred by using MIMMS-AIS and the associated EROSL will be annotated.

- Parts applied, ensure ERO is annotated with maintenance action, including man hours.
- Action is identified by the defect codes on the ERO.
- Parts removed from the Layettes must be substantiated by maintenance action on the ERO.

- Annotation of the EROSL is not required if all parts are installed upon receipt from supply.
 - Annotation of the ERO is still required.

- All parts held by the maintenance section must be on an EROSL and associated with an ERO or authorized PEB.
- Parts that are not indicated on EROSL and ERO or in an authorized PEB will be reported to supply for disposition.
- Same applies for Non-FMSS supported units.

QUESTIONS?

QUIZ

"B"

QUESTIONS TO YOU!

Q. Material in the ERO Bins must be validated how often?

A. Daily and Bi-weekly

QUESTIONS TO YOU!

Q. What is the difference between validation and reconciliation?

A. Validation is confirmation of repair part requirements, and reconciliation is used to ensure validation requirements are properly logged within the MIMMS/SASSY (AIS) output reports.

BREAK!!!

ENGINEER EQUIPMENT SUPPLY SUPPORT (BUDGET)

BUDGETING

BUDGETING: Planning for future expenditures

BUDGET: Itemized list of these expenses.

Each unit in the Marine Corps prepare and submit a budget annually.

BUDGETING CONT.

- Budget Officer estimates the amount of money needed for;
 - **✓** Repair parts.
 - **✓** Replacement of T/E material.
 - **✓** POL.
 - **✓** DSSC (Direct Support Stock Control)-Self Service.
 - **✓** Open Purchases.
 - **✓** Operational Commitments.
 - **✓** Other expenses.

BUDGETING CONT.

Funds are authorized yearly.

- Funds are distributed by fiscal quarters.
 - **✓** October, January, April, July

BUDGETING CONT.

- Funds are distributed to using units by the Major Cmd's Comptroller based on:
 - ✓ The budget submitted the previous year
 - **✓** Amount of funds available.

If more funds are required a request is submitted by local procedures.

MMO RESPONSIBILITY

Impact of funding is indirect which makes the role of the MMO vital.

The MMO will coordinate and ensure maintenance requirements for areas is imputed.

PLANNING / FORCASTING

- Marine Corps Integrated Maintenance Management System - Automated Information System (MIMMS-AIS)
- ► Marine Air-Ground Financial Accounting and Reporting System (MAGFARS)
- Local System
- >AIS data can be captured quickly and routinely

PLANNING / FORCASTING CONT.

- MMO's first task in the budgeting process is to ensure that historical information is correct and accurate.
 - ✓ Cost of parts that were scrounged will not appear on any list.
- > Past expenditures are historical.
 - ✓ MCBul 7100 series provide Field Budget guidance.

PLANNING / FORCASTING CONT.

- G-3/S-3 and G-4/S-4 will provide facts regarding tempo of;
 - Future Operations.
 - Logistic Commitments.
 - New Equipment Receipts
- This info can help MMO's assist maintenance sections express their requirements for the budget.

CONTROL

Funds must be controlled when allocated.

There are numerous regulations concerning obligation authority.

CONTROL CONT.

- The MMO has the responsibility to provide staff advice on;
 - **✓** Internal reallocation of money.
 - **✓** Funds obligated for maint. are applied in the best manner.
 - ✓ Fiscal reviews are conducted.

Two examples of this control are:

TWO EXAMPLES OF CONTROL

FIRST.

- ✓ DPR shows readiness-reportable equipment in a short-funds status.
- ✓ DPR shows non-critical parts on order for both readiness/non-readiness reportable items.
- ✓ The MMO will coordinate with supply and fiscal officers to present the CO with information to;
 - Reallocate funds.
 - Cancel requisitions.
 - Request additional funds.

CONTROL CONT.

> SECOND.

✓ MMO with the unit's supply and fiscal officers and in coordination with the comptroller should develop a Job Order Number (JON) which will provide data collection and must be kept current.

FISCAL RECORD

- A record of all financial transactions and adjustments on those transactions, plus current status of funds remaining.
- ► Ledgers are required to be maintained by using units to ensure that funds are not over obligated.
- Ledger must be kept accurate at all times IAW local procedures.
- Document reconciliation. Additional Demand Listing (ADL) will aid in reconciliation.

QUESTIONS?

QUESTIONS TO YOU!

- What is budgeting?
- A. Planning for future expenditures.

- Q. When are funds authorized and distributed?
- A. Funds are authorized annually and distributed quarterly.

QUESTIONS TO YOU!

• When funds are allocated, what is the most important thing to do with these funds?

A. Control.

SUMMARY

During this period of instruction we have covered maintenance production maintenance phases, maintenance function – preventive maintenance checks and services, maintenance function – corrective maintenance, maintenance production process, maintenance cycle time, maintenance by cannibalization and selective interchange and overflow maintenance.

SUMMAKY CONT.

- During this period of instruction we have discussed the purpose, goal, primary reason, and usage criteria for PEB and ERO Parts Bin (Layettes).
- During this period of instruction we have covered basic information on budgeting.

BREAK!!!